



filed electronically in docket office on 08/29/14

851 Aviation Parkway  
Smyrna, TN 37167

Date: August 29, 2014

Mr. David Foster  
Tennessee Regulatory Authority  
502 Deaderick Street, 4<sup>th</sup> Floor  
Nashville, TN 37243

re: Docket No 14-00006 Monthly Update

Mr. Foster,

Tennessee Wastewater Systems, Inc. (TWSI), respectfully request any information that is not directly associated with the "Scales Project" Docket 14-00006 be removed and assigned a new docket number.

We have seen no official documentation posted to the docket index. In response to the Director's request, we submit the following information:

Schedule 1.1-1.2 Term sheet for financing from Wilson Bank & Trust

Schedule 2.1-2.5 The timeline of events for Maple Green Facility.

Schedule 3.1-3.4 The Engineer's estimate for an RFP to construct the Wetlands at Maple Green, Cedar Hill, and repair the drip field at Smokey Village.

Within schedule 2.1-2.5 TWSI obtained financing in the amount of \$200,000.00 from First Bank on February 21<sup>st</sup>, 2014, but do the lengthy process at TDEC, the plans did not get approved until July 26<sup>th</sup>, 2014. As the date of this filing, we have not received confirmation from First Bank if the financing is still in good standing.

We have no new documentation at this time to add to this docket.

Sincerely,

Charles Hyatt



## Community Financial Centers

**TROUSDALE**  
Bank & Trust

*DeKalb*  
*Community Bank*

**Community Bank**  
of Smith County

Offices of Wilson Bank & Trust Lebanon, TN

MEMBER FDIC 

*Schedule 1-2*

August 21, 2014

Tennessee Wastewater Systems Inc.  
849 Aviation Parkway  
Smyrna, TN. 37167

Dear Charles Hyatt,

We have discussed your loan request for \$500,000 and the following is the terms and structure that we have discussed if the loan were to be approved.

**BORROWERS/GUARANTORS:** Tennessee Wastewater Systems Inc. / Personal guaranties of principals involved with Tennessee Wastewater Systems Inc., to be approved by bank.

**USE OF PROCEEDS:** Repairs to treatment facilities of Tennessee Wastewater Systems Inc.

**TERMS:** Amount: \$500,000.00

Interest Rate: 5.00%

Term: Fixed for 5 years, then rate adjusts annually to prime plus .50%. Floor of 4.75%

Loan Fee: \$5000.00

Payments: Monthly Principal and Interest payments up to 20 year maximum

**Refinance Penalty:** 1% during first 60 months.


**COLLATERAL:** 1<sup>st</sup> mortgage on real estate to be determined. This would need to be unencumbered, marketable real estate that is not a wastewater treatment facility with a maximum 70% loan to value. Collateral to be approved by bank

**LOAN DOCUMENTS:** The loan will be subject to loan documentation in form and substance satisfactory to Wilson Bank & Trust, including a loan agreement containing certain representations, warranties and covenants, and a deed of trust, assignment of leases and rents and security agreement. In addition, Wilson Bank & Trust may require a survey, mortgagee's title commitment (and following closing, a policy), flood zone certification and evidence of insurance with respect to the subject real property, all in form and substance satisfactory to Wilson Bank & Trust and at borrower's expense. An appraisal of the property will be required. The appraisal and title work will be commissioned by Wilson Bank & Trust.

**EXPENSES:** All out-of-pocket expenses incurred in negotiation and documentation of

Schedule  
1.2

the loan, including attorney's fees and expenses would be paid by borrower.

  
John Foster  
Sr. Vice President

**\*\*\*\*This is not a loan commitment. This is the parameters that Wilson Bank & Trust will set up a loan if it were to be approved by our Board of Directors at our next Board meeting in September. \*\*\*\***

## Maple Green Timeline Update

### Event

2/1/2014 Collapse of SE corner of Lagoon.

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### Build temporary berm

2/1/2014 - 2/8/2014

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### Emergency Order

2/5/2014 Emergency Order is issued

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### Commissioners meeting

2/6/14 Commissioners meeting, Explain we intend to remove the Lagoon and go to a free surface flow wetland.

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### Introduce aeration

2/12/2014

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### Preliminary Engineering report

2/14/2014 Meeting With DWR Director and Deputy Director

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### Initial Response Letter From DWR to Preliminary Engineering Report

2/20/2014

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2/21/14 FINNELL & APPROVED by FIRST BANK for \$200,000.00

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### Submit Wetland design

3/10/14 Plans Electronically submitted to TDEC

2.2

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**Follow up letter on Preliminary Engineering Report From DWR**

3/18/2014

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**meet with BH to discuss TDEC Questions**

3/25/14 8:00 AM to hear TDEC sizing concerns.

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**Below Treatment requirements:**

Beginning March 11, BOD5 results appear to consistently be below 45mg/L

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**Notified TDEC of intent to go to Drip with effluent.**

March 24, 2014

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**Respond to TDEC questions in E-mail**

3/26/14 E-mail response demonstrating the modeling calculations used.

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**Email intent to reduce sampling**

3/31/2014 Sent Notice that on April 7 we intend to reduce sampling should results received the week of 3/31 indicate adequate treatment.

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**Meet with Brad Harris, Bob O'Dette, Fali Kapadia, Allen Rather**

4/14/14 TDEC Requested Examples again. They gave their numbers and the equation they are currently using.

Discussed whether the size was the only hold up. BH: No, there are multiple questions, they have just focused on sizing. I explained that their numbers gave a very unrealistic 50 Day HRT. Brad said he felt the numbers supported that.

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**Sent Email identifying another error in the calculation used by the state.**

4/23/14 Sent an E-mail explaining the equation used by the state is giving them the unusual units of gallon/feet rather than square feet for surface area.

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**Received response from TDEC arguing the validity of their numbers.**

4/25/14

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**Sent Response with supporting EPA documentation, calculations, correction of the TDEC calculations, and a letter**

4/28/14

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**Sent Follow Up Email asking if they had received the letter.**

5/6/2014 Sent an e-mail. Received a response indicating they had been busy and had not had a chance to review. Brad Harris Asked for the number of connections to the Maple Green Facility. We supplied that information then they asked for a phone call to discuss the calculations.

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**Received an e-mail from Bob O'Dette expressing that other facilities are shallower and have a larger foot print.**

5/8/2014

Email From Brad

6/10/2014 Body as follows:

"Roy,

We reviewed the plans you submitted for Maple Green. We found them acceptable for the most part. We do need some additional information and a few changes as described below.

1. The plans must include a flow meter (totalizer) capable of accurately measuring the wastewater flow to the system.
2. The plans must incorporate fencing around the wetland cells.

3. A description of plant placement and type. Such placement and type should be in line with the EPA recommendations. The plans mention, "If vegetation is problematic, mechanical aeration and a suspended growth media will be used to simulate plant stalks and plant roots." This is not acceptable. If such a redesign is proposed in the future it will require resubmission of plans.
4. A Startup and more detailed maintenance plan including tasks and frequencies.
5. One year of water use data for the commercial establishments connected to the system.
6. Soil information and drip field design supporting the system. We currently have one old map that shows approximately 3.5 acres supporting the system. I don't have any current plans for the drip system.

Give me a call if you would like to discuss or have any questions.

I have attached the letter from Director Dudley regarding the CAP. To my knowledge we haven't received a response from you to her letter.

I am also waiting on the operational manual and as-built for Logue Road.

Brad

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**Mailed letter, monthly averages of water usage provided by Springfield Water, updated specs, Updated drawings, and noted the submitted plans were for the replacement of lost treatment capacity not to address disposal areas or installation thereof.**

6/13/2014

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**Received a response back from TDEC**

6/25/2014

"Roy,

We need a new copy of the plans incorporating items, 1,2,3.

2.5

We are missing section 6.2 you reference.

The water use numbers you submitted are not representative of one year of water use data. We would like the monthly flows for each establishment for the last year.

I would also like to see the plans used to install the drip system or updated plans if the system wasn't installed as per the original plan. I assume there isn't any additional area mapped other than the 3.5 mentioned.

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**Sent response letter.**

7/1/2014

Drew the fence and a box to indicate a flowmeter on the plans. Informed TDEC that Springfield water had refused to provide detailed water usage. Informed them the reference to 6.2 in the previous letter should have been 5.2.

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**TDEC gets the commercial use numbers from Springfield water and provides them to us.**

7/18/2014 They decide these numbers closely match the average usage provided previously by the utility.

Brad Ask by Phone that the sentence "If vegetation is problematic, mechanical aeration and a suspended growth media will be used to simulate plant stalks and plant roots."

No engineering reason is given however Brad Harris Indicates that TDEC will no approve plans with that sentence in them.

A replacement page with that sentence is hand delivered in the afternoon.

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**Receipt of Approved Drawings**

7/26/2014



Schedule  
3.1

## RFP Cost Estimate

[illegible]

3.2

## RFP Cost Estimate

|  |       |            |            |           |
|--|-------|------------|------------|-----------|
| Maple Green Constructed Wetland estimate |       |            |            |           |
|  |       |            |            |           |
| Item                                     | QTY   | Units      | Unit Price | Total     |
| 8" pipe SDR 21                           | 500   | FT         | 8          | 4000      |
| 8" Pipe SDR 26                           | 1200  | FT         | 8          | 9600      |
| 8" Tee                                   | 17    | EA         | 105        | 1785      |
| 8" 90                                    | 21    | EA         | 80         | 1680      |
| 8"cap                                    | 21    | EA         | 6          | 126       |
| Liner 30Mil                              | 27000 | SQFT       | 0.4        | 10800     |
|  |       |            |            |           |
| #357 or #4 stone, washed                 | 5     | 10yd loads | 350        | 1750      |
| 57 stone, washed                         | 5     | 10yd loads | 350        | 1750      |
| Poultry Net                              | 4000  | SQFT       | 0.15       | 600       |
| Geo Fabric                               | 28000 | SQFT       | 0.15       | 4200      |
| Plants                                   |       |            |            |           |
| 70% cover                                | 6300  | SQFT       | 1          | 6300      |
| 50% cover                                | 4500  | SQFT       | 2.5        | 11250     |
| excavator                                | 2     | Months     | 8000       | 16000     |
| 1500 gallon pump tank duplex pumps       | 2     | EA         | 3000       | 6000      |
| Labor                                    | 640   | Hours      | 75         | 48000     |
|  |       |            |            |           |
| Fence                                    | 800   | FT         | 17         | 13600     |
| Instrumentation                          | 1     |            | 10000      | 10000     |
|  |       |            |            |           |
| Soil Mapping                             |       |            |            | 0         |
| Property acquisition                     |       |            |            | 0         |
| easements                                |       |            |            | 0         |
|  |       |            |            |           |
|  |       |            |            |           |
| Project Management                       |       |            |            | 18430.125 |
| Construction Total                       |       |            |            | 165871.13 |
| Bond                                     | 2%    |            |            | 3317.4225 |
| Construction Contingency                 | 10%   |            |            | 16587.113 |
| Engineering                              | 240   | Hours      | 100        | 24000     |
| CAI                                      | 160   | Hours      | 100        | 16000     |
|  |       |            |            |           |
|  |       |            |            |           |
| Project total                            |       |            |            | 225775.66 |

## RFP Cost Estimate

|   |       |            |            |          |
|---|-------|------------|------------|----------|
| Cedar Hill Constructed Wetland estimate |       |            |            |          |
|   |       |            |            |          |
| Item                                    | QTY   | Units      | Unit Price | Total    |
| 8" pipe SDR 21                          |       | FT         | 8          | 0        |
| 8" Pipe SDR 26                          | 1250  | FT         | 8          | 10000    |
| 8" Tee                                  | 17    | EA         | 105        | 1785     |
| 8" 90                                   | 21    | EA         | 80         | 1680     |
| 8" cap                                  | 21    | EA         | 6          | 126      |
| Liner 30Mil                             | 45000 | SQFT       | 0.4        | 18000    |
|   |       |            |            |          |
| #357 or #4 stone, washed                | 10    | 10yd loads | 350        | 3500     |
| 57 stone, washed                        | 0     | 10yd loads | 350        | 0        |
| Poultry Net                             | 6000  | SQFT       | 0.15       | 900      |
| Geo Fabric                              | 45000 | SQFT       | 0.15       | 6750     |
| Plants                                  |       |            |            |          |
| 70% cover                               | 10000 | SQFT       | 1          | 10000    |
| 50% cover                               | 10000 | SQFT       | 2.5        | 25000    |
| excavator                               | 2     | Months     | 8000       | 16000    |
| 1500 gallon pump tank duplex pumps      | 2     | EA         | 3000       | 6000     |
| Labor                                   | 640   | Hours      | 75         | 48000    |
|   |       |            |            |          |
| fence                                   |       | FT         | 17         | 0        |
| Instrumentation                         | 1     |            | 10000      | 10000    |
| Power                                   | 30000 |            |            | 30000    |
| Soil Mapping                            |       |            |            |          |
| Property acquisition                    |       |            |            | 0        |
| easements                               |       |            |            | 0        |
| Drip Field                              | 9000  | FT         | 3.5        | 0        |
| field lines                             | 1200  | FT         | 15         | 0        |
| project management                      |       |            |            | 23467.63 |
| Construction Total                      |       |            |            | 211208.6 |
| Bond                                    |       |            |            | 4224.173 |
| Construction Contingency                | 10%   |            |            | 21120.86 |
| Engineering                             | 240   | Hours      | 100        | 24000    |
| CAI                                     | 160   | Hours      | 100        | 16000    |
|   |       |            |            |          |
|   |       |            |            |          |
| Project total                           |       |            |            | 276553.7 |

3.4

## RFP Cost Estimate

|                          |      |       |            |        |
|--------------------------|------|-------|------------|--------|
| Smokey Village estimate  |      |       |            |        |
|                          |      |       |            |        |
| Item                     | QTY  | Units | Unit Price | Total  |
|                          |      |       |            |        |
|                          |      |       |            |        |
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|                          |      |       |            |        |
| fence                    | 1200 | FT    | 17         | 20400  |
|                          |      |       |            |        |
|                          |      |       |            |        |
| Soil Mapping             | 2    | Acre  | 700        | 1400   |
| Property acquisition     |      |       |            | 42000  |
| easements                |      |       |            | 1500   |
| Drip Field               | 9000 | FT    | 3.5        | 31500  |
| field lines              | 1200 | FT    | 15         | 18000  |
| project management       |      |       |            | 14350  |
| Construction Total       |      |       |            | 129150 |
| Bond                     |      |       |            | 2583   |
| Construction Contingency | 10%  |       |            | 8425   |
| Engineering              | 120  | Hours | 100        | 12000  |
| CAI                      | 80   | Hours | 100        | 8000   |
|                          |      |       |            |        |
|                          |      |       |            |        |
| Project total            |      |       |            | 160158 |